

House Bill 5
Long Range Building Program
Department of Administration
Enterprise System Services Centers
Super Computer

Proponent Testimony by Dick Clark, Chief Information Officer (CIO)
Information Technology Services Division (ITSD)
Department of Administration
444-2777

Before the
House Appropriations Subcommittee
March 20, 2007

Mr. Chairman, members of the committee, for the record my name is Dick Clark. I am the Chief Information Officer (CIO) of the State of Montana.

Addressing specifically the fiscal aspects of HB5, ITSD requests a total funding level of \$24.15 million for the Enterprise Systems Services Centers and \$9.8 million for the Super Computer for fiscal 2009 biennium. These proposals are comprised of 100% General Fund OTO spending. They are no additional FTE's tied to them and ITSD have structured our fiscal request with the help and guidance of A&E and we believe it is adequate.

Enterprise Systems Services Centers highlights are:

- One Center in Helena with sufficient office space only for employees essential for the operations of the computer center for \$18,850,000
- One Center in Eastern Montana for \$2,250,000
- Telecommunications Links, Hardware/Software, Furnishings and Moving Expenses for \$3,050,000.
- There are no requests for increased FTE
- Predicted Recurring Annual Costs are estimated at \$530,000 per year recovered through rates charged to agencies.

Super Computer highlights are:

- Super Computer Hardware/Software for \$5,650,000
- Visualization Hardware/Software for \$1,000,000
- Network Hardware & Annual Telecom Lease Costs for \$100,000
- Tape Storage/Printer Peripherals for \$400,000
- Power/Cooling/Security/Fire Suppression/Other Fixed Costs for \$2,650,000
- There are no requests for increased FTE
- Predicted Recurring Annual Costs are estimated at between \$1.7 and \$1.9 million. This is higher than our original estimate of \$1.3 million in testimony before the Long Range Building Subcommittee. The increase is due to better estimates on connectivity costs.

I thank you for the opportunity to testify before you today. With your leadership and support of these projects, Montana will become more proactive, forward-looking, skilled, and better able to

meet the large number of opportunities and challenges facing the State in the 21st Century in both the private and public arenas.

I or the staff I brought is available to answer any questions you may have.

Thank you again.

HB5 Enterprise Systems Services Centers Proposal

Three key infrastructure areas:

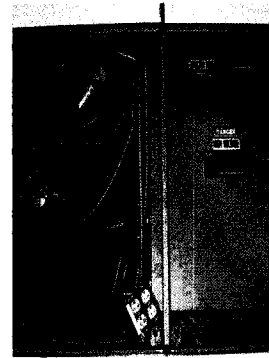
1. Data Center
2. Network Operations Center
3. Voice Operations Center

Enterprise services are available to the full breadth of State government

- All three branches of State government
- Partnering with Montana University System
- Other units of government

**Currently provided out of the Mitchell Building ...
which has serious problems**

- **Security**
 - Proximity to streets & parking
 - Building access/control
 - Lack of floor to ceiling solid walls
- **Water**
 - East wing 12" below grade
 - Plumbing runs
- **Building seismic vulnerabilities**
- **Space**
 - Layout limits use of space
 - No room for expansion
- **Serious deficiencies noted in:**
 - Legislative Audit
 - Independent assessments
 - Tours by legislators and administration officials



Water sump pump
next to high
voltage box



Vulnerable to
drive-up

**Every critical service provided by the State is at risk
due to Mitchell Building deficiencies.**



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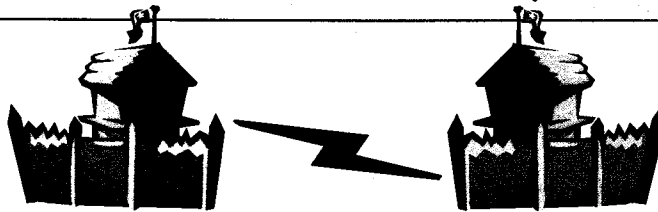
ESSC Proposal

Objectives

Move the State's Systems Services out of an inadequate facility that's plagued with problems.

1. To provide improved security.
2. To provide near non-stop operation of critical applications.
3. To accommodate the data center needs of other agencies.
4. To maximize benefit from disaster recovery/COOP investments.

Highlights



- **Two facilities**
 - Helena ESSC with technician offices
 - Eastern Montana ESSC
 - Shared production load
 - High speed communications between sites
- **Designed for security**
- **Sized and equipped to handle critical load**
- **Redundancy for critical applications**
 - Communications
 - Computing capacity
 - Application Data
- **Revised approach to Disaster Recovery and COOP**
- **Accommodate capacity requirements of agencies**

Cost Estimate	Initial Cost	Recurring Cost
Helena ESSC & Office Design/Construct	\$18,850,000	
Eastern MT ESSC Design/Construct	\$2,250,000	
High Capacity Telecommunication Links	\$500,000	\$180,000
Hardware & Software (High Availability)	\$1,750,000	\$350,000
Furnishings & Moving Expense	\$800,000	
Total	\$24,150,000	\$530,000



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HB5 Supercomputer Proposal

Objective

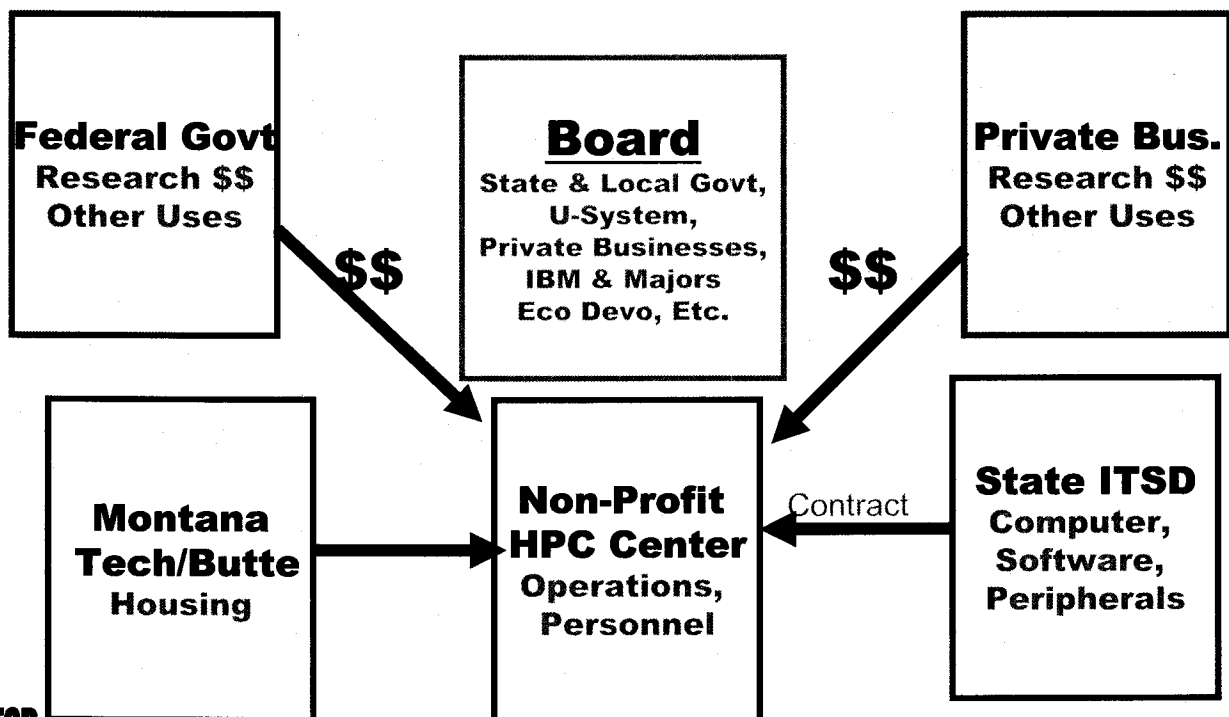
Establish a High Performance Computing (supercomputer) Center at MT Tech to support research contracts and grants:

- MT University System
- Federal research contracts (DHS, DOD, etc)
- Private sector research contracts

Modeled after the successful Miss. State Univ. "High Performance Computing Center"

Benefit

- Improve state's technology infrastructure
- Improve state's competitive positioning
- Improve state's economy – inside and outside "the boot"
- Bring opportunities to emerging workforce
- Bring Montanans & Business home
- Promote Public Private Partnerships



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How Will the Funding Work?

- **State Commitment :**

- Initial Start-up capital: **\$2.8 MM** State money (OTO) for initial Supercomputer equipment configuration
- Operating expense: \$500k/year in ITSD budget (proposed in ITSD budget bill)

- Up to **\$7MM overhead** on grants and contracts funds

- Additional capital increase supercomputer capacity
- Additional operating expense above \$500k/year.
- Spending authority of \$9.8 MM for #1 & #2

HPC Center Cost Estimate	Capital Investment	Recurring Annual Cost
Supercomputer hardware/software	\$5,650,000	
Visualization hardware/software	\$1,000,000	
Network Hardware & Annual Telecom Lease Costs	\$100,000	\$387,000 (see note below) or \$628,000
Tape Storage/Printer peripherals	\$400,000	\$40,000
Power/Cooling/Security/Fire suppression	\$300,000	
Fixed Cost	\$2,350,000	\$200,000
Personnel		\$1,100,000
Total	\$9,800,000	\$1,727,000 or \$1,968,000

Note: The \$387,000 is the circuit cost if HB14 Network Expansion is enacted; the \$628,000 cost is for a Butte-Seattle high-speed link if Network Expansion is not enacted.



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